

## Claims

1. (Currently amended) A method for reserving conference resources for a multipoint conference, comprising:

receiving a request for a reservation of the multipoint conference reservation;

receiving a list of participants;

predicting communication paths for a plurality of the participants;

estimating a multipoint control unit resource requirement;

selecting a first multipoint control unit to host the multipoint conference;

determining availability of the multipoint control unit resource requirement at approximately a scheduled start time and for a duration of the multipoint conference; and

selecting a second multipoint control unit to host the multipoint conference, ~~if~~ when the first multipoint control unit does not have the multipoint control unit resource requirement available at the scheduled start ~~time~~ time;

estimating corresponding network resource requirements associated with a plurality of the communication paths;

selecting a first communication path of the plurality of the communication paths;

determining availability of the estimated corresponding network resource requirements associated with the first communication path; and

selecting a third multipoint control unit when the first communication path does not include the estimated corresponding network resource requirements at approximately the scheduled start time.

2. (Original) The method of Claim 1, wherein the multipoint control unit resource requirement comprises a digital signal processor resource requirement.

3. (Original) The method of Claim 1, wherein the multipoint control unit resource requirement comprises a communication port requirement.

4. (Currently amended) The method of Claim 1, further comprising reserving the multipoint control unit resource requirement of the first multipoint control unit for the multipoint conference, ~~if~~ when the multipoint control unit resource requirement is available.

5. (Previously presented) The method of Claim 4, wherein the multipoint control unit resource requirement comprises gateway port requirements.

6. (Previously presented) The method of Claim 4, wherein the multipoint control unit resource requirement comprises digital signal processor requirements of a digital signal processor farm.

7. (Currently amended) The method of Claim 1, further comprising requesting an alternative estimated start ~~time~~ if time when the second multipoint control unit does not include the multipoint control unit resource requirement at approximately the scheduled start time.

8. (Canceled)

9. (Currently amended) The method of ~~Claim 8~~ Claim 1, further comprising:  
selecting a second communication path of the plurality of the communication ~~paths~~ if paths when the first communication path does not include the estimated corresponding network resource requirements at approximately the scheduled start time; and  
selecting a fourth multipoint control ~~unit~~ if unit when the second communication path does not include the estimated corresponding network resource requirements.

10. (Previously presented) The method of Claim 9, further comprising determining availability of the network resource requirements associated with each of the plurality of the communication paths.

11. (Currently amended) The method of Claim 10, further comprising selecting a fifth multipoint control ~~unit~~ if unit when any of the plurality of the communication paths do not include the corresponding network resource requirements.

12. (Original) The method of Claim 1, wherein the communication paths are predicted using RSVP PATH messages.

13. (Currently amended) A method for reserving network resources for a multipoint conference, comprising:

receiving a request for a reservation of the multipoint conference reservation;

receiving a list of participants;

selecting a first multipoint control unit to host the multipoint conference;

predicting communication paths associated with a plurality of the participants;

estimating corresponding network resource requirements associated with a plurality of the communication paths;

selecting a first communication path of the plurality of communication paths;

determining availability of the estimated network resource requirements associated with the first communication path at approximately a scheduled start time and for an estimated duration of the multipoint conference reservation; and

selecting a second multipoint control unit to host the multipoint conference, ~~if~~ when the first communication path does not include the estimated corresponding network resource requirements at approximately the scheduled start time and for the estimated ~~duration~~ duration;

selecting a second communication path of the plurality of the communication paths, when the first communication path includes the estimated corresponding network resource requirements at approximately the scheduled start time; and

selecting a third multipoint control unit, when the second communication path does not include the estimated corresponding network resource requirements.

14. (Previously presented) The method of Claim 13, wherein the corresponding network resource requirements comprise bandwidth.

15. (Previously presented) The method of Claim 13, wherein the corresponding network resource requirements comprise gateway port requirements.

16. (Previously presented) The method of Claim 13, wherein the corresponding network resource requirements comprise digital signal processor resource requirements of a digital signal processor farm.

17. (Currently amended) The method of Claim 13, further comprising reserving the corresponding network resource requirements associated with the first communication path for the multipoint conference, ~~if~~ when the network resource requirement is available.

18. (Canceled)

19. (Previously presented) The method of Claim 14, further comprising determining availability of the corresponding network resource requirements along each of the plurality of the communication paths.

20. (Currently amended) The method of Claim 19, further comprising selecting a fourth multipoint control ~~unit if~~ unit when any of the plurality of the communication paths do not include the corresponding network resource requirement.

21. (Original) The method of Claim 14, wherein the communication paths are predicted using RSVP PATH messages.

22. (Original) The method of Claim 14, further comprising:  
reserving a pool of bandwidth for high priority request; and  
allocating available bandwidth from the pool according to a predetermined priority scheme.

23. (Original) The method of Claim 22, wherein the predetermined priority scheme is established according to a type of multipoint conference requested.

24. (Original) The method of Claim 22, wherein the predetermined priority scheme is established according to an identity of a requestor of the multipoint conference.

25. (Original) The method of Claim 22, wherein the predetermined priority scheme is established according to a plurality of unique identifiers corresponding to a plurality of the participants, respectively; and

the available bandwidth is allocated to high priority participants until all high priority participant request are processed.

26. (Currently amended) An apparatus for reserving conference resources for a multipoint conference, comprising:

a server operable to receive a request for a reservation of the multipoint conference reservation and to receive a list of participants; and

the server being further operable to:

predict communication paths for a plurality of the participants;

estimate a digital signal processor resource requirement for the multipoint conference;

select a first multipoint control unit to host the multipoint conference;

determine availability of the digital signal processor resource requirement at approximately a scheduled start time and for an estimated duration of the multipoint conference; and

select a second multipoint control unit to host the multipoint conference;—if when the first multipoint control unit does not have the digital signal processor resource requirement available at the scheduled start time and for the estimated ~~duration~~ duration;

estimate corresponding bandwidth requirements associated with a plurality of the communication paths;

select a first communication path of the plurality of communication paths;

determine availability of the estimated bandwidth requirement associated with the first communication path; and

select a third multipoint control unit when the first communication path does not include the associated bandwidth requirement at approximately the scheduled start time and for the estimated duration.

27. (Currently amended) The apparatus of Claim 26, wherein the server is further operable to reserve the digital signal processor resource requirement from the first multipoint control unit for the multipoint conference,—if when the digital signal processor resource requirement is available.

28. (Canceled)

29. (Currently amended) An apparatus for reserving network resources for a multipoint conference, comprising:

a server operable to receive a request for a reservation of the multipoint conference reservation, and to receive a list of participants; and

the server being further operable to:

select a first multipoint control unit to host the multipoint conference;

predict communication paths associated with a plurality of the participants;

estimate corresponding bandwidth requirements associated with a plurality of the communication paths;

select a first communication path of the plurality of communication paths;

determine availability of the estimated bandwidth requirement associated with the first communication path at approximately a scheduled start time and for an estimated duration of the multipoint conference reservation; and

select a second multipoint control unit to host the multipoint conference, ~~if~~ when the first communication path does not include the estimated bandwidth requirement at approximately the scheduled start time and for the estimated ~~duration~~ duration;

select a second communication path of the plurality of the communication paths, when the first communication path includes the estimated bandwidth requirement at approximately the scheduled start time and for the estimated duration; and

select a third multipoint control unit when the second communication path does not include the estimated bandwidth requirement.

30. (Currently amended) The apparatus of Claim 29, further comprising:

memory operable to reserve the bandwidth requirement associated with the first communication path, ~~if~~ when the bandwidth requirement associated with the first communication path is available.

31. (Canceled)

32. (Original) The apparatus of Claim 29, wherein the server is further operable to:

reserve a pool of bandwidth for high priority multipoint conference request; and  
allocate available bandwidth from the pool according to a predetermined priority scheme.

33. (Currently amended) Logic encoded in computer readable storage media for reserving a network resource for a multipoint conference, the logic ~~operable~~ to perform the following steps:

- receive a request for a reservation of a multipoint conference reservation;
- receive a list of participants;
- predict communication paths for a plurality of the participants;
- estimate a digital signal processor resource requirement for the multipoint conference;
- select a first multipoint control unit to host the multipoint conference;
- determine availability of the digital signal processor resource requirement at approximately a scheduled start time and for an estimated duration of the multipoint conference; and

- select a second multipoint control unit to host the multipoint conference, ~~if~~ when the first multipoint control unit does not have the digital signal processor resource requirement available at the scheduled start time and for the estimated ~~duration~~ duration;

- estimate corresponding bandwidth requirements associated with a plurality of the communication paths;

- select a first communication path of the plurality of the communication paths;

- determine availability of the estimated bandwidth requirement associated with the first communication path; and

- select a third multipoint control unit when, the first communication path does not include the associated bandwidth requirement at approximately the scheduled start time and for the estimated duration.

34. (Currently amended) The logic encoded in computer readable storage media of Claim 33, wherein the logic is further ~~operable~~ to reserve the digital signal processor resource requirement from the first multipoint control unit for the multipoint conference, ~~if~~ when the digital signal processor resource requirement is available.

35. (Canceled)

36. (Currently amended) Logic encoded in computer ~~readable~~ storage media for reserving network resources for a multipoint conference, the logic ~~operable~~ to perform the following steps:

receive a request for a reservation of a multipoint conference reservation, and to receive a list of participants;

select a first multipoint control unit to host the multipoint conference;

predict communication paths associated with a plurality of the participants;

estimate corresponding bandwidth requirements associated with a plurality of the communication paths;

select the first communication path of the plurality of the communication paths;

determine availability of the estimated bandwidth requirement associated with the first communication path at approximately a scheduled start time and for an estimated duration of the multipoint conference reservation; and

select a second multipoint control unit to host the multipoint conference, ~~if~~ when the first communication path does not include the estimated bandwidth requirement at approximately the scheduled start time and for the estimated ~~duration~~ duration;

select a second communication path of the plurality of the communication paths, when the first communication path includes the estimated bandwidth requirement at approximately the scheduled start time; and

select a third multipoint control unit when the second communication path does not include the estimated bandwidth requirement.

37. (Currently amended) The logic encoded in computer ~~readable~~ storage media of Claim 36, wherein the logic is further ~~operable~~ to reserve the bandwidth requirement associated with the first communication path, ~~if~~ when the bandwidth requirement associated with the first communication path is available.

38. (Canceled)

39. (Currently amended) The logic encoded in computer ~~readable~~ storage media of Claim 36, wherein the logic is further ~~operable~~ to:

- reserve a pool of bandwidth for high priority multipoint conference request; and
- allocate available bandwidth from the pool according to a predetermined priority scheme.

40. (Currently amended) An apparatus for reserving conference resources for a multipoint conference, comprising:

means for receiving a request for a reservation for the multipoint conference ~~reservation~~, and to receive a list of participants;

means for predicting communication paths for a plurality of the participants;

means for estimating a digital signal processor resource requirement for the multipoint conference;

means for selecting a first multipoint control unit to host the multipoint conference;

means for determining availability of the digital signal processor resource requirement at approximately a scheduled start time and for an estimated duration of the multipoint conference; and

means for selecting a second multipoint control unit to host the conference, ~~if~~ when the first multipoint control unit does not have the digital signal processor resource requirement available at the scheduled start time and for the estimated ~~duration~~ duration;

means for estimating corresponding bandwidth requirements associated with a plurality of the communication paths;

means for selecting a first communication path of the plurality of communication paths;

means for determining availability of the estimated bandwidth requirements associated with the first communication path; and

means for selecting a third multipoint control unit when the first communication path does not include the associated bandwidth requirement at approximately the scheduled start time.

41. (Currently amended) The apparatus of Claim 40, further comprising means for reserving the digital signal processor resource requirement from the first multipoint control unit for the multipoint conference, ~~if~~ when the digital signal processor resource requirement is available.

42. (Canceled)

43. (Currently amended) An apparatus for reserving network resources for a multipoint conference, comprising:

means for receiving a request for a reservation of the multipoint conference ~~reservation~~; and to receive a list of participants;

means for selecting a first multipoint control unit to host the multipoint conference;

means for predicting communication paths associated with a plurality of the participants;

means for estimating corresponding bandwidth requirements associated with a plurality of the communication paths;

means for selecting a first communication path of the plurality of the communication paths;

means for determining availability of the estimated bandwidth requirement associated with the first communication path; and

means for selecting a second multipoint control unit to host the multipoint conference, ~~if~~ when the first communication path does not include the estimated bandwidth requirement at approximately the scheduled start ~~time~~ time;

means for selecting a second communication path of the plurality of the communication paths, when the first communication path includes the estimated bandwidth requirement at approximately the scheduled start time; and

means for selecting a third multipoint control unit when the second communication path does not include the estimated bandwidth requirement.

44. (Currently amended) The apparatus of Claim 43, further comprising means for reserving the bandwidth requirement associated with the first communication path, ~~if~~ when the bandwidth requirement associated with the first communication path is available.

45. (Canceled)